THE DENTAL DIGEST

ORAL HYGIENE NUMBER

JANUARY 1911 VOL XVII NO. 1

GEORGE WOOD CLAPP, D.D.S.

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THE DENTAL DIGEST

GEORGE WOOD CLAPP, D.D.S., Editor

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JANUARY, 1911

No. 1



BY GEORGE WOOD CLAPP, D.D.S., NEW YORK

Our claims as to the benefits which would result if oral hygiene was extensively practised rest on a foundation of faith. We have often seen a marvelous transformation in the individual for whom oral hygiene has been established. We have seen the complexion clear, the body gain in weight, and an improvement in mental efficiency and amiability, and we mentally transfer this Twentieth-Century miracle from the individual to the mass. We say that if the establishment of oral hygiene in one mouth will do this for one person, the establishment of similar conditions in ten thousand mouths will benefit ten thousand individuals. We claim that the persons thus benefitted will become assets to the community, developing into self-supporting, self-respecting and efficient economic units. We claim also that the benefits are even greater than these. For as no adult lives to himself, but is affected by the conditions in the community, so the child does not live alone, but is affected by the conditions of his little world of school and playground.

And as every child in that little world is at the mercy of the children from ill-cared-for homes, we claim that the general practice of oral hygiene would prove a valuable safeguard about the lives of all the little ones.

If any extensive and conclusive proof of the truth of these claims exists, the writer does not know of it. Proof of such claims may be of two widely different kinds, each proper and valuable in its place.

The first form of such proof is largely dependent on personal observation. Mary Smith, a child, is afflicted with toothache and is often absent from her class. She suffers much pain, lives much of her time under nervous tension, and is irritable in disposition, and disposed to be resentful. She is unable to keep up with her class and perhaps falls one or more years behind her grade. Mary's teeth are repaired, her mouth put into healthy condition and proper breathing conditions established. After a time the teacher notes that of late she has had no trouble with Mary Smith, that she is regular in attendance, that she is no longer resentful or irritable, and that she does her work well and possibly regains the lost ground. She may question Mary and find that the work of the dentist has removed all cause for pain, that Mary feels much better than formerly, that she has recovered from her indigestion and that life is now much more enjoyable. And that teacher, reaping in her own experience the results of an individual case of oral hygiene, may realize its importance and become not only a believer in it, but an active promoter of it. Due credit has not yet been rendered to those teachers who have been earnest and effective in urging the practice of oral hygiene both on the children and on their parents.

Such proof as this may be sufficient for the teacher and principal who witness it, or for others who can be brought into personal touch with the case. But it is not sufficient for those who are too far away to come into such personal contact. Nor can it be deemed sufficient for those who, accustomed to more scientific presentations of subjects, ask more than isolated instances of personal testimony. Nor is it sufficient to satisfy those workers who have grasped the idea of Community Oral Hygiene.

The idea of Community Oral Hygiene goes farther than the notion that the dentists should bear indefinitely the burden of establishing oral hygiene even for those children too poor to pay. It seems that the question is too great for the dentists, and that it is a subject for community action; that it is part of the great and new gospel that the community shall not only develop the minds of the children, but that the community shall perceive the relations between sound bodies and sound minds, and say to parents: "The bodies of your children must be healthy—fit homes

for good minds; they must be the starting-points for the self-respecting and efficient citizen of the future. If you can afford to put your child's body into that condition, you must do so. If you cannot afford it, the community will do it."

The presentation of the subject of Community Oral Hygiene to communities must rest on a basis more definite and more secure than the observation of Mary Smith's teacher. There must be such proof as is generally offered in behalf of really great projects. That proof must be definite, extensive and conclusive. Only then can the real work of establishing oral hygiene begin. It must be clearly shown that, "it is cheaper for the community to make the child wholly well and to develop it into an efficient, economic unit, than it is to carry it through the school period as a retarded child, costing more than its fair share of expense, and to allow it to develop into the inefficient adult, with the necessary concomitants of hospitals, police supervision, courts and jail, at each step of which the unit is a direct charge on the efficient members of the community."

If there is any proof of the value of Community Oral Hygiene extant in America which can be offered as conclusive in behalf of such an appeal, it is not generally known. And the purpose of these articles is to tell of an effort now under way to establish such proof, in order that it may be used by workers everywhere.

Let us examine for a moment what the nature and extent of such proof should be. It should include a considerable number of persons, preferably children. They should be children whose records showed them to have been for some time below their healthy fellows in efficiency and if possible in morals, but who do not manifest organic deficiencies. In other words, "retarded" as distinguished from "defective" children. They should be children whose most pronounced physical defects were connected with the condition of the mouth. They should be so located that they could be under observation for some time before and after the establishment of oral hygiene. They should be carefully examined physically and the most exhaustive physical record made of the condition of each child. The mouths should be put into hygienic conditions and these conditions maintained. The use and care of the teeth should be taught. The children should be watched to make sure of the maintenance of such conditions. At certain periods before, during and after the experiment, carefully chosen psychological tests should be had, and the records charted for comparison with the runming records in the school. If physical tests can be made with similar care so much the better. At a time determined on the records from the child's work during the period of test should be compared with the

records preceding the test. And the value of oral hygiene to the individual and community may be pretty accurately determined by the resulting comparisons.

Before the story of the first effort to offer such conclusive proof of the value of oral hygiene on a large scale can be told, it is necessary to go back a little and see what led up to it and what made it possible. This telling will also throw light on some subjects which have caused much uneasiness to those members of the dental profession who feared that the prerogatives of the profession were to be either overridden or its dignity trailed in the dust.

For ten years or more the National Dental Association has had a Committee of Oral Hygiene, and for every one of those years, until the last, the efforts of that Committee have been so hampered by those in power in the Association, or viewed so coolly, that it could accomplish nothing of practical value. When the Committee for 1909-1910 was appointed, the Chairmanship went to Cleveland, Ohio. Here also resided the Chairman of the similar Committee of the Ohio State Dental Society. And here dwelt also the Cleveland Dental Society, which was to prove itself one of the broadest-minded dental societies of the day.

All these factors might have dwelt together without anything having come of it; but in this case they did not. The questions of demonstrating first the need of oral hygiene and second the practical value of it to the community were brought up. Entrance to the public schools of Cleveland was obtained, approximately 3,000 cursory examinations were made, and it was demonstrated that even on such rapid examination, ninety-seven per cent. of the children were found in need of dental attention. So much for the demonstration of the need.

The matter of meeting the requirements exhibited by such extensive needs for dental work was something entirely different. So far the work had been done without subjecting the National Association to any considerable expense. It was hardly to be hoped that relief could be afforded on so economical a basis.

When the Chairman of the National Committee of Oral Hygiene applied to the Association for funds with which to make a demonstration of the value of oral hygiene which should equal the demonstration of its need, he was informed that the Association could afford only \$250 to \$300 for the work. In the face of what must be done to make any conclusive showing, this sum was evidently wholly inadequate. The Committee was told that if it desired other funds it must raise them.

When we look back from some time in the future when oral hygiene is the rule and not the exception, the men who composed this Committee and who faced this question with so slight a financial backing will be regarded as little less than heroes. They met and discussed all ways of procuring funds. They even thought of earning the money themselves. But few indeed are the dentists who can donate from their own purses such funds as were here required. These men had already given of their time, their money, and their strength. More indeed they proposed to do, but this load was too great.

Appeals to philanthropy were considered. But their very need proved their weakness. They had no conclusive proofs of the value of the thing for which they were to ask money. They could not show to anyone that the expenditure of large sums to establish oral hygiene for the children of a school or city was sure to result in benefits which warranted the investment. And if philanthropy is greater to-day than ever before, it is also more systematic. And he who is to pour money into a cause demands to know for what it is going and what reason there is for faith in the returns. Oral hygiene could then give no reason.

But enthusiasm and faith are contagious. And even without funds much was done. Permission was secured from the Board of Education of the city of Cleveland to establish clinics in four of the city schools and rooms in the school buildings had been given for that purpose. The Committee had secured from dental manufacturers the loan of six complete operating-room equipments, four for use in the schools just mentioned, one in a hospital and one in the parochial schools. The 122 members of the Cleveland Dental Society had promised to man the clinics thus equipped. To this end each member signed an agreement to give one week of time to the clinics or thirty-three dollars in money. Three forms of work were to be carried on, hand in hand. Every child in the schools was to be examined and a report of the oral conditions sent to the parents; there were to be illustrated lectures on oral hygiene; and for indigent children there was to be free dental work.

So far as the local conditions went, this was a magnificent campaign. The Cleveland Dental Society was handling its local problem, the Ohio State Society was doing its share and would likely reap the benefits of the work which naturally fell within its borders. But the view of the National Committee could not be limited to Cleveland. That is only one city. And all about it are other communities to whom the gospel of oral hygiene was of equal value. The National Committee was doing wonders in Cleveland. How should it make the results of the Cleveland work national in scope? How should other communities be spared the long, uphill fight to get the first things done? How should they be guided away from the errors which are inseparable from pioneer work? How should dentists everywhere be given such a clear demonstration of the value of oral hygiene that they could present the subject intelli-

gently to the municipalities where they resided? How should they be supported in their campaign for the establishment of this work by the community and at community expense?

This was the problem which the National Committee had to answer without funds. Where the Committee found the answer, what it was, and the discussion it provoked, form an interesting story.

(The second chapter of this story is expected to appear in February.)

THE ORAL HYGIENE CAMPAIGN IN THE SOUTH

By J. P. Corley, D.D.S., SEWANEE, TENN.

Community Oral Hygiene had its birth at the Old Point Comfort meeting of the National Dental Association ten years ago. It dragged along a weary existence without coöperation from the profession or assistance from the national organization to bloom into new life and real existence under the leadership of the present Chairman of the National Committee, ably assisted by the Cleveland Dental Society in 1909-10.

Oral Hygiene has come to mean the science of prophylaxis, or prevention, applied especially by the individual to his own mouth with such coöperation and assistance from his dentist as may be necessary to insure immunity from dental and oral disease.

Community Oral Hygiene contemplates the application of this principle through the education of the public. This was an innovation in the old régime of patch-work and repair and for its practical application requires a reformation.

To accomplish a reform which changes the daily habits and customs of the masses, and especially the common people, there must be a fundamental necessity for such change, and the people must be convinced of this necessity.

In order to convince the people of such need there must be strong and tireless leaders who are willing to work without the fear of punishment or the hope of immediate reward.

Community action cannot be secured until community guardians are convinced of its economic importance, and even then they are slow to act until backed up, at least in a measure, by public opinion.

Inasmuch as the burden of popular dental education must be borne by the dental profession the first educational work will have to be done within the rank and file of the profession.

Back in the eighties, and long before the immortal Miller gave to the world the scientific proofs of the now universally accepted theory of the etiology of dental caries, R. R. Freeman, M.D., of Nashville, professor of operative dentistry in Vanderbilt University, was an enthusiastic advocate of oral sanitation for its prophylactic effect. He preached it

in season and out of season to his students, to his confrères and to the school children in his vicinity. He went so far as to have printed on his bill heads this motto, "Clean teeth do not decay."

We have had a galaxy of pioneers in this field among whom I might mention Mewborn, Crawford, Grady, Stiff, Cowardin, Johnson, Crossland, Mrs. J. M. Walker and her son, Wm. Ernest, and others.

Besides these, most of whom are still doing something, there is developing an army of younger and abler men to whose fortunate lot it will fall to accomplish the reforms dreamed of by their professional fathers.

The campaign of popular education in general prophylaxis which the medical profession are prosecuting with so much enthusiasm and success, is preparing the way for the specialist. The work already done in prophylactic dental education in the United States and abroad has provided valuable data for campaign matter, so the march of events in the field of popular dental education will be recorded in geometrical progression.

The South is handicapped in comparison with the East by having a scattered population with a few communities supporting dental societies, and there is as yet scarcely sufficient public sentiment to allow the individual dentist to take up the work alone without attracting adverse criticism.

It is a well-known fact that the Southern bred are slow to change old-established customs. This is especially true in regard to professional traditions. It is not uncommon to find a man who will extract a first lower permanent molar for a child under fifteen years, thus rendering him a dental cripple for life, and even defend such criminal malpractice on the floor of an Association; who would allow his wife and children to go hungry rather than take a prominent part in bringing the attention of the community to any subject pertaining to dentistry.

A majority of the Southern men have been educated in Southern colleges and have been bred in an atmosphere of professional chastity which in some respects amounts to little less than prudery.

In the mad rush of commercialism it may be that the prudery of the Southern rank and file, tempered by the common-sense progressive spirit of our Eastern confrères will establish for the profession at large an *esprit de corps* which will give the profession a publicity that will give better service to a larger number and at the same time save it from the charlatanism which now threatens its seduction.

However, in the past, and to some extent at present, this spirit of modesty interferes with the inauguration of an active and aggressive campaign in Oral Hygiene.

Another consideration of which we have heard little in the journals

and less in the Associations, is the financial feature involved. A majority of our Southern men save little more than a comfortable livelihood. Educational work takes time and time is money.

The average dentist has not sufficient business perspicacity to see that this educational propaganda would increase his clientelle and would enable him to do a less laborious and more efficient class of work. When we begin to suggest in our society discussions that the work will be attended by a financial reward as great or even greater than the expense, some well meaning but short-sighted blue stocking raises the cry, "Commercialism," and protests that we are seducing our profession.

While our men are not a moneyed class, still if we were fully alive to the exigency of the situation and were educated up to the financial support of educational work we would find and provide the means.

The Hygiene Committee having no funds with which to operate, made a proposition to The Dental Manufacturers' Club which resulted in the Club placing at the disposal of the Committee funds with which to work. Three hundred dollars of this money was placed at the command of the Southern Branch's Committee by the National's Committee, all of which was spent except \$16.00 and the results reported at the Houston meeting. This money enabled the Committee to visit a number of the more important cities in the interest of the cause, confer with local societies, interview Boards of Education, municipal officers, newspapers, etc., and give illustrated lectures before public audiences.

As a result of the showing made at the Houston meeting the Association appropriated \$500.00 for the Committee's next year's work and an additional \$500.00 was subscribed by state and local societies.

The Committee plans to use the money appropriated by the Association as a general expense fund and the balance for the promotion of the work in the communities from which the subscriptions came.

The amount of money at the disposal of the Committee is sufficient for little more than enough to continue the educational work among the dentists themselves. However, the present indications encourage the Committee to believe that a number of the larger societies and some of the smaller ones will soon take up the work along the lines proposed by the National Hygiene Committee.

In my next article I expect to give some detailed information as to the status of the work in New Orleans, Memphis, Nashville, Atlanta, Birmingham, Houston, Tuscaloosa and other Southern cities.

I have been bred to all the traditions of the South, but am a lover also of the East and West. In the long uphill fight for community immunity from dental disease I will stake my reputation as a student of social dentistry on the prophecy that the South will do her share.

THE ART OF DENTAL CASTING *

BY L. W. STRYCKER, NEW YORK CITY

INLAY WAXES

This subject is one to which dentists have apparently given very little thought, further than to secure a wax that will work well in the mouth. Many waxes are used by different dentists and each seems to consider that which he uses the best.

One finds very few dentists who have given attention to qualifications in waxes, which are even more important than ease of working in the mouth. It is certainly desirable to have a wax that works to one's satisfaction when making the pattern, but it is even more important to have one that takes only a proper time to melt when heated in the investment, that leaves only a proper amount of residue when the investment is heated for casting; and, most important of all, that leaves the surface of the investment material in the best possible condition when the wax has been burnt out. Few indeed are the dentists who have given these details of casting their proper attention. And fewer are they who have made any careful experiments for determining the relative values of the different waxes in these parts of the work.

Complaints that castings are not exact reproductions of the wax patterns; that the surfaces of the casting were rough or pitted; or that the cast was incomplete, are common enough. And relief has been sought from such results in almost every direction save the one where the writer believes the trouble frequently lies, namely, in the action of the wax pattern in the different stages of casting. Any or all of the undesirable consequences just mentioned may result because the wax does not melt or burn out properly, thereby causing a gas in the mould which prevents complete or perfect casting. Or the wax might leave a residue which would not burn out when the investment was heated to the heat necessary for casting. The influence of such a residue on the casting may be learned by a study of the illustrations accompanying this article, and by the experiments here suggested.

But even with these shortcomings present in some of the waxes, the fault is sometimes directly that of the dentist. The writer has often seen a dentist who was not quite satisfied with the form of a wax pattern, build up by means of a hot spatula and scrap wax which had been lying on the bench and had collected dust and dirt which had no place in such a pattern. Often this wax was added without regard to

^{*} Copyrighted by L. W. Strycker, 1910.

its character or action in those portions of the operation where exactness was of the greatest value. It is hardly to be wondered at that in many cases such methods have resulted in an imperfect casting. Nor is it remarkable that the dentist, overlooking his own ignorance or carelessness at an important point, has blamed his casting machine or the investment material for a failure which was his alone.

The faulty manipulations of our inlay waxes are in part the fault of the manufacturers. With each wax, exact directions for its manipulation at every step of the work should be given, and we should be informed as to the amount and residue which may be expected in the mould.

In the writer's opinion, the inlay wax which Dr. Taggart at one time offered for sale is superior to any other with which he has become acquainted. Several attempts to imitate this wax have been made, but without complete success. Now that this wax is no longer for sale, dentists should urge on the manufacturers the importance of producing one like it, for the benefit of the profession.

In order that dentists may acquaint themselves with the respective values of the different inlay waxes at the several stages of the work of making castings, the following experiments are suggested. They are such as can be carried out by any dentist in his laboratory, requiring no special apparatus. The results of the writer's experiments are here given. The education which such experiments will afford every dentist who conducts them, will amply repay the trouble required and doubtless suggest to many the means by which better results may be obtained.

In order to carry out the test fairly, it is desirable that the samples of wax to be tested shall be uniform in size. A mould about the size of a pea may easily be made in plaster and a sample of each of the waxes to be tested may be warmed, pressed into it and trimmed to a given level. If the dentist has not samples of the different inlay waxes, he will do well to write to the several manufacturers and secure them.

Obtain a smooth, flat glass and clean and polish it well. Mix some Standard Investment, pour a little onto the glass and jar it well. This will eliminate the danger of air bubbles and will also cause the fine particles to settle next to the glass. Add the remainder of the investment material to that in place on the glass, building up a disk about one-half inch thick. (Care should be exercised to have the thickness uniform in order that the heat may be even at all parts, later in the experiment.) This disk may well be about seven inches in diameter if a number of waxes are to be tested. If fewer waxes are tried, the division to be assigned to each wax should be not less than one inch

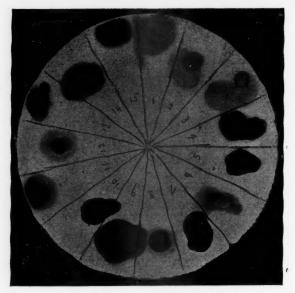
wide at the circumference. When the investment material is well set, remove it from the glass by carefully pushing the thin edge of a flat plaster spatula under it.

To make the diagram or chart which is to be a guide in this work, draw on a sheet of paper of the same size as the disk a circle which can be contained within the area of the disk. Through the center draw lines dividing the area into as many compartments as there are samples of wax to be tested. Draw a similar circle on the side of the investment material which was in contact with the glass. This surface will be the upper surface in the experiments to follow. Trim the slab to the circle, flaring it from below upward—that is, the lower surface will be smaller than the upper. The object of thus flaring the margin is to turn aside the flame to be used, so that it will not come into contact with the waxes. Lay the paper disk on the investment disk and mark on the investment the ends of the lines establishing the several divisions. Draw these lines on the investment, from the marks thus made, carrying each line through the center. Number the divisions on both investment and paper, and on the paper sheet enter the name of the wax which is placed in each division. It may serve to scratch the name on each division of the investment.

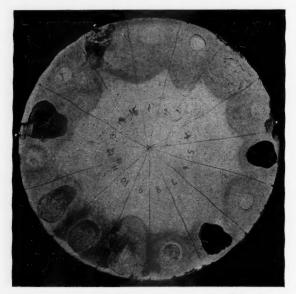
Place each sample of wax to be tested in the division assigned to it, in the position shown on the accompanying illustrations. Great attention should be given to the heating of the waxes, if the best results are desired. Place the disk on a grating about ten inches above a very low heat. The furnace used by the writer is a Buffalo Ladle Furnace No. 14, with holes in sides, about two inches from the top, to admit one-fourth-inch rods across to form a grating. The burner in this furnace is well adapted for heating casting flasks and gives out a uniform heat. If such a furnace is not at hand, use a furnace or burner which will distribute the heat evenly over the entire surface of the investment disk, since it is important that all parts of it be heated uniformly.

Watch the waxes closely and note which begins to glaze first. Note and record which wax melts first. Continue the heat until all are melted, noting the order of melting. When all are melted, remove the disk from the fire and examine carefully the color, amount and condition of residue, as to smoothness.

So far the test has shown only what the waxes do under heat sufficient to melt them. The disk is again placed over the fire and is this time carried to a red heat as a flask would be before gold was cast. The disk should then be removed from the fire and carefully studied. It may be assumed that if a model had been made of each of the waxes tested, if it had been invested and heated, the inner surface of the in-



Disk showing waxes just melted.



Disk has been heated as a flask would for casting. Note difference in resulting deposits.

NAMES OF INLAY WAXES TESTED	Number of Wax	Color of Wax Before Melting	Color of Residue After Melting Into Disk Only	Order of Glazing	Order of Melting	Order of Spreading Wax into Investment on Heating to Temperature High Enough Enough Wax. 15 Spreading Most, 1 Spreading Least	Relative Amt. Residue Left on Heating to Temperature High Enough to Melt Wax. I Leaves Greatest; 15 Leaves Least	Relativ Le Di 1 Leav	Relative Amount of Residue Left After Heating Disk to Red Hest. Also Color. Leaves Greaters Amount; 15 Leaves Least Amount.	Order of Smoothness of Investment After Wax Ins. Ben Burned/Out. 15 Smoothest; 1 Roughest
Taggart	-	Dark Green	Light Green	15th	14th	15th	14th	15th]	Gray	15th
Klewe	63	Pink	Light Brown	7th	12th	12th	15th	14th	Light Brown	14th
КІеwе	63	Red	Light Pink	9th	6th	11th	13th	10th	Gray Brown	12th
КІеwе	4	Brown	Dark Brown	8th	9th	7th	9th	7th	Mottled Gray	7th
Klewe	ro.	Black	Black	11th	5th	3rd	4th	4th	Black	3rd
Jenkins, made_by Klewe	9	Pink	Light Brown	10th	11th	6th	12th	12th	Light Brown	13th
Jenkins, made by Klewe	7	Black	Black Mottled	12th	3rd	8th	6th	3rd	Black	2nd
S. S. White	00	Light Green	Light Green	2nd	2nd	2nd	1st	1st	Mottled Brown	4th
S. S. White	6	Black	Purple Blue	4th	7th	14th	10th	11th	Light Brown	10th
Standard	10	Gray Black	Black	14th	13th	5th	2nd	5th	Brown	5th
Caulk's	11	Green	Dark Green	3rd	4th	4th	5th	13th	Mottled Gray	11th
Clev. Dent	12	Dark Green	Bluish Green	1st	1st	1st	8th	6th	White	9th
Dentsply	13	Dark Green	Dark Green	5th	10th	10th	7th	2nd	Dark Brown	let
Consolidated	14	Black	Blue Black	13th	15th	13th	11th	9th	Light Brown	8th
Peck's Cones	151	Red Brown	Brown	6th	8th	9th	3rd	8th	Brown	6th

vestment—that against which the gold was to cast—would be in the same condition as the surface of that division of the disk on which that particular wax has been burned away. If the surface of the disk is smooth, throughout the entire area occupied by the wax, it may be assumed that the interior surface of the investment would be smooth and that there would be nothing to prevent a smooth cast. But if the area of the disk occupied by any wax be coated with a deposit, the surface of which is more or less rough, it may be assumed that the surface of the investment against which the gold was to cast would be thus covered wholly or in part. If that residue will not burn away on the disk at the proper heat for casting gold, there is no reason to suppose that it would burn away in the investment. And it is evident that a smooth cast cannot be made against a surface roughened by a deposit from the wax.

It is impossible to have the illustrations show the relative amounts of residue remaining from each of the several waxes. This is the more reason why each dentist should carry out this experiment for his own enlightenment. The results of tests of fifteen waxes are here given. The names of the waxes tested appear in the first column of the table.

(The next article in this series is expected to appear in the February issue.)

MOUTH BREATHING AND DEAFNESS

DR. W. SOHIER BRYANT in an article entitled "Middle Ear Deafness," published in the *New York Medical Journal*, says: "Chronic middle ear catarrh makes about 69 per cent. of all chronic deafness. The causes of chronic middle ear catarrh arise in the naso-pharynx and affect the middle ear by interfering with the Eustachian tube."

This statement is of interest to every dentist. One of the most common causes of interference with the function of the Eustachian tube is mouth breathing. When breathing is done through the mouth, the tissues about the opening of the Eustachian tube are inflamed, often chronically, by the irritating particles contained in the air, by the temperature of the air, which is often unsuited to the naso-pharynx, and by other causes. Mouth breathing may thus lead to dullness of the ear, dullness of the sense of hearing and resulting mental backwardness.

Dentists, more than any one else, should be interested in observing

the method of breathing, and in advising as to the necessity of correction of wrong methods. The services of the dentist or orthodontist may be necessary, but the correction will be worth, to either child or adult, all it is likely to cost.

G. W. C.

GOOD NEWS FROM ALBANY AND COLUMBUS

By W. G. Ebersole, M.D., D.D.S., CLEVELAND, OHIO

The following telegram was received at Columbus on December 7th:

"ALBANY, N. Y., Dec. 7, 1910.

DR. W. G. EBERSOLE,

Southern Hotel,

Columbus, Ohio.

Dr. H. L. Wheeler of New York City, and Dr. W. A. White of Phelps, were to-day appointed by me as lecturers on Oral Hygiene for the State Department of Health.

(Signed)

EUGENE H. PORTER, Commissioner of Health."

This is the first recognition of the kind that has been given to dentistry in this country. It is the direct outcome of the meeting held in Buffalo, and is the indirect result of the opening of the Oral Hygiene Campaign of the National Dental Association in this city last March. Dr. W. A. White is a member of the National Committee, and it is due more to his activities in this direction than to any other one man that we were able to bring about these appointments.

The telegram from Commissioner Porter was received just one year from the day the Ohio State Dental Society appropriated \$500.00 for the spreading of the Oral Hygiene propaganda. The effect produced by the reading of the telegram was such that immediately following same Ohio voted to give its committee another \$500.00, and voted \$100.00 to the support of the Education and Information Bureau. This is the first contribution made by a dental organization to the support of the work.

TAKE precautions before the evil appears; regulate things before disorder begins.

SET about difficult things while they are still easy; do great things while they are still small.—From "How to be Great," by Lao Tzu.

ORAL HYGIENE LECTURE TO CHILDREN

FROM 12 TO 13 YEARS OF AGE

BY GEORGE WOOD CLAPP

When lecturing to children the first part of the lecture may well be given over to entertainment which is not visibly connected with Oral Hygiene. If this entertaining is skilfully done, it can be made to take the audience with the speaker from the very start. And it will insure for the following remarks an attention which the most scientific opening would be unable to compass. The lecture which follows has been given several times. In the opinions of the educator having these schools in charge, it has proven of value to the children. And the attention which has been given it by the children has been proof of their interest.—Educor.

THE slide which we are to look at first has no name. Perhaps it will need one because it may be that some of the boys here will know what the man is doing. In fact there are four of these slides which are in-



tended especially for the boys. And then we will have four especially for girls.

What is this man doing? (Generally answered, "Throwing a ball." Sometimes witty answers come which the lecturer can use to advantage if he is wise enough to join in the interest which the children show.)

"Does it take good muscles to throw a ball well?"

[&]quot;Does it take good eyes to throw it straight?"

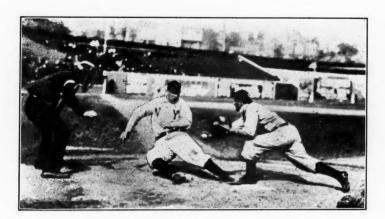
Let us remember that it takes both good eyes and good muscles to play good baseball, because pretty soon we shall come back to that and



see how to get the very best kind of muscles and eyes. Now let us see what happens to that ball and the player.

"Has this chap been running fast?" (Chorus, "Yes.")

We saw that it took good muscles to throw well. What does it take



beside good muscles to run well? (Someone pretty sure to answer "Wind.")

"That is right. It takes good wind, meaning plenty of breath. How must one breathe if he is to have good wind?" (Chorus of varying answers, but some one pretty sure to answer "Through the nose.")

"There is a chap who knows how to breathe and I shouldn't wonder if he can run. He breathes through the nose. That is the proper way to breathe, as I hope to show you."



And now we will have some slides for the girls. The first slide is of a little girl who was out in the swing one day with her old rag doll



"Dinah" beside her. She was enjoying herself very well when her mother came to the door and said "Molly, I think your big doll is not very well. You'd better come in and see to her. So Molly hurried into the house and found her big doll looking very pale. After some thought

she decided to send for the doctor, but there was a great hole in dolly's dress which should have been mended several days before. Molly thought that before sending for the doctor she should mend the hole. Her mamma gave her a needle and some thread and said, "Now, dear, you are growing to be quite a girl and you can thread the needle and sew up that hole."

" Does it take sharp eyes to see the eye of the needle?" (Chorus, "Yes.")

"And steady hands to guide the thread straight?"

When Molly had the hole well mended, she went for the doll and doctor, and here we have a picture of him as he prescribed for the dolly.



He told the little mother some interesting things about the doll, and I am going to tell you some of those things this afternoon about yourselves.

We have seen on these slides that it takes good health to be able to play well. And when you are older and go to high school or to work, you will find that it takes good health to be able to study well or to get ahead in the world.

And now I want to tell you how to fit yourselves to get ahead when the high-school time or the work time comes. I want to show you the connection between the health of the ball players, between your ability to run fast and throw far and the teeth with which you chew your food. I am quite sure if one of you were asked, you wouldn't think there was any connection between the condition of a boy's teeth and his skill in playing ball. But we shall see that there is.

And they will show us something even more important. Not one of you wants to be the dunce of the class? You would hate to feel that you couldn't learn as fast as any other boy or girl. And if you were dull in this way you might think that it was something in your brain that made it work slower than the other fellow's. But we are learning nowadays that the difference between the smart boy or girl and the dull boy or girl is not usually a difference in brains. One usually has just as good a brain as the other. But very often one cannot eat as well as the other or breathe as well. And it is always the one who can-



not eat well or breathe well who is slower. Remember that. When you see a dull scholar the trouble is more likely to be in his mouth or throat than in his brain. And when his mouth and throat are clean and healthy he is likely to give the best of you a race for the honors, both in the playground and the class-room.

How many of you have baby brothers or sisters? Here is something about them which probably you do not know. Even the very smallest of them has in its head at the present time all the teeth but eight that it will ever have. You cannot see them. You will not see even the first of them until baby is six or seven months old. Then they will come through one after the other until baby is about as old as you are now (13 years).

Did you know that baby's jaw is just like a house?

What does a house have in it? Doesn't it have rooms? Isn't it having rooms that makes it a house? Well, down under that pretty red covering of baby's gums are more rooms than in the largest of your

houses. There are about 20 rooms in each jaw and in each room there lives a little tooth which will some day come through the gums, just as yours have. Here is a picture of some of those rooms with part of the walls cut away so that we can see the teeth. This baby was about $2\frac{1}{2}$ years old, and here you can see the baby teeth which have come through the gum. And behind and above them are the rooms where the teeth are growing which should last this person all through life. Do you wonder how these teeth are to get down through the gum so that they can chew? Here is how they do it. When it is nearly time for one of the permanent teeth to come through, it begins to nibble away the root of the baby tooth just in front of it. If all goes well, it nibbles that root clear off so that the baby tooth just sits on the gum and is very loose, so that mamma can pull it with a thread.

But if the boy or girl has been careless about the baby teeth and let them decay so that the nerve is affected, the permanent tooth cannot nibble the root of the baby tooth away; and then there is trouble and toothache. Or if the baby tooth has been extracted before it is time for the tooth above it to come through, there may not be room for the permanent tooth. And then there will be trouble. Because each baby tooth just saves the space for the tooth above it to come through and stand straight. If it cannot come through straight, it will crowd and shove just like some boys do when they want to get into the line. And just as the boy makes the line crooked by shoving, so the tooth will make all the other teeth crooked by pushing them out of place. Just remember that the baby teeth must be kept from decay so that the permanent can nibble off the roots without causing toothache; and so that the permanent teeth can come through straight.

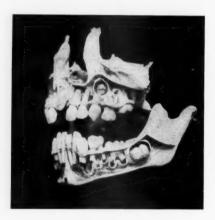
On the lower jaw you will see a larger room and in it the crown of a larger tooth. This is a big strong molar which comes through the gum when the child is six years old.

It will be well for you to pay special attention to this molar. And if you don't want your faces to be crooked when you grow up, it will pay you to remember that this is the first of what the dentists call the "permanent teeth." A thing is permanent when it is intended to last a long time. And this molar is called permanent because it should last as long as you live. If you give it good care, it will last all those years and work for you without causing you an ache or a pain. It comes just behind the baby teeth, just where you see its little room located now. Most parents think it is a baby tooth because it comes without any of the baby teeth coming out to make room for it. But it is not a baby tooth.

If this tooth is allowed to decay, as it so often is, it gives a great

deal of trouble. And if it has to be extracted, it sets the whole mouth so crooked that it can never be made just right again.

In the next slide you will see that the rooms for the permanent teeth are larger, you can see more of them and of the teeth that are forming in them, awaiting the years when they shall come to the surface. That six-year molar that we spoke about has now come through and taken its place right behind the baby teeth. If you are more than six years old, you may be pretty sure you have had this molar. You can tell by counting from the middle of the mouth backward. It is the sixth tooth on each side. If you find it decayed, you should speak to mamma



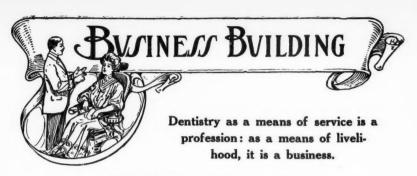
or papa about it and have it fixed as soon as possible or it may throw all the other teeth out of line.

In the next slide the eye tooth, which the first slide showed in its little room, is nearly down to place. This boy or girl was about 13 years old. The little room on the lower jaw, at the back, was where the third molar, sometimes called the Wisdom Tooth, lived, but it evidently fell out when this bone was sawed.

We have spoken about rooms in the jaw, just as if the jaw were a house. And now I want to tell you that the tooth itself is like a house.

(This article is expected to be continued in the February issue.)

On account of the length of Dr. Strycker's paper we have been unable to publish this month the "Physical Basis of Success." This article will appear in the February issue.



INVESTMENTS-WHAT NOT TO DO

BY HENRY HALL, NEW YORK CITY

Dr. Clapp has done me the honor to ask for a few articles on the fundamentals of investments, written for the information of men, usually intensely occupied with the practical work and studies of their professions, and unable, on that account, to devote time and thought to proper consideration of the elaborate array of factors which govern the value and safety of securities.

When a man, whatever his vocation in life, acquires any amount of surplus cash, he is confronted with the question as to whether he shall save it or spend it. People who have large capital can afford to spend. They have passed through the preliminary grind of saving money. They no longer need to be economical. But those who have their fortunes to make, who have not yet provided for old age, must save. The corner stone of ultimate financial comfort is the saving habit. Not in a thousand cases is there more than one exception to this rule. Saving is the starting point in the race for fortune.

It is characteristic of most women, and of too many men, that money burns in their pockets. Even if they do not spend it, they want to put it to immediate use. They want a better return in the way of income than the savings bank supplies, which is perfectly proper. Knowing the fortunes which have been and can be made, in stocks and bonds, they also want to invest their money, at once, in something which will advance in value and thus add to their original capital. This is also perfectly proper and at certain times entirely feasible. Investment at the right time is, in fact, the only way by which the original capital can be increased.

And this leads to the first matter, which should be mentioned with regard to the fundamentals of investment, namely, what not to do.

And first, the investor should begin by disregarding entirely the prospectuses and advertisements of new corporations, no matter how

enthusiastic the language of the promoters, and no matter what species of property the corporations have been formed to exploit. The mails and newspapers are full of these alluring invitations to investors. It is natural that a man should want to make his money go as far as possible in his investments. The temptation is almost irresistible to put it into low-priced shares, selling from \$1 to \$10 each, when a prospectus promises both large future dividends and an advance in price of the shares to double or treble their current value. Owing to this trait of human nature, the people of the United States have been robbed of more than \$100,000,000 within the last ten years through putting their money into wild-cat propositions, enthusiastically boomed in glowing prospectuses and advertisements. I admit that there are certain low-priced stocks to-day, sound, of genuine merit, selling between \$4 and \$8 a share, which yield an income of from 10 to 20 per cent. on the investment, and which will ultimately sell much higher than now. But these are not the stocks which are exploited in advertisements.

An investor may take it as an indisputable fact, that no flowery prospectus, no newspaper advertisement and no public promise of any kind is required for the flotation of a valuable business proposition. It is never necessary to call a town meeting, or blow a trumpet, to obtain all the capital that is wanted for a really good thing.

Men of means are ready and eager, always, to supply all the funds required to establish a new and promising business. Take the Mergenthaler Linotype concern as an instance, a company which now pays between 15 and 20 per cent. a year, whose shares it is almost impossible to buy in the market at any time, and never for less than \$200 to \$220 a share. No advertisement of the stock of that company was ever seen in a newspaper or prospectus. Every share was eagerly taken, at the start, in almost a secret conclave, by men who knew the merits of the machine. This case is typical. Good things do not have to go begging for subscriptions to the capital stock. Flaring advertisements may ordinarily be taken as a sign that important men, sound judges, do not want the stock, and that the promoters of the enterprise have little more in view than to get possession of your money, regardless of what happens afterward. Thousands of corporations floated in this way have never thereafter been heard of, except discreditably, or except on account of the great decline in the value of their shares. Take the stocks exploited by the ingenious and brilliant Thomas W. Lawson of Boston in his various amazing advertising campaigns! Look at them now! I know of only one, Chino Copper, which has ever made good, or is worth to-day anything like the price

which was promised for it. Some of them are worth only a few cents on the dollar.

It has fallen to my lot, at various times within the past year, to be consulted with regard to United Wireless stock. No one ever saw any more wonderful statements as to the prospects of a new company than those which appeared in the circulars with which United Wireless flooded the United States. I do not myself believe that the promoters meant to be dishonest, or that they did not actually hope to establish their company upon a profitable basis, eventually. But if their enterprise had commended itself to the sound judgment of men of capital, they could have placed every dollar of the stock without resorting to glowing advertisements. The United States Government has chosen to regard the company as a swindle and the promoters were recently arrested. A great deal of the public's money has been lost, or indefinitely locked up, in this stock.

In the course of a long experience, nothing has amazed me more than the number of men and women who have allowed themselves to throw away their hard earned money by buying the stock of wild-cat companies, in reply to prospectuses and advertisements. The stocks are now utterly worthless.

Without dwelling upon this point, in detail, any further, I consider it the first fundamental of investment to pay no attention whatever to securities which can be floated only through the medium of flaming circulars and advertisements.

Next, consult an investment banker, if you wish, but do not take his advice when you buy, until at any rate after you have seen some other people and given the matter a little thought. As a class, the investment bankers are men of the highest sagacity, probity and honor. But they seldom recognize a fact, which is of the utmost importance to a man who wants to make his money grow. They do not admit, to a customer, that securities can go down, as well as up. Their whole attention is concentrated upon the single question, as to whether the income is safe. Upon that point, they must be considered competent authorities. No one of them will ever imperil his great reputation by intentionally assisting in the flotation of a security, concerning which there is any doubt as to the certainty of the income. But one and all of them will say to a customer, "What difference does the price make to you, as long as the security is for investment?" Well, it does make considerable difference. In order that invested capital may be safe, a bond or a stock must eventually advance in value. To say nothing of profits on the purchase, the price must advance in time to afford a margin of safety for the capital.

It is true that unforeseen calamity may overtake the country, for which no banker, no adviser, and no investor is responsible, and which the best judges could not have foreseen. A man must take his chances as to that. Some things can be foreseen, others not. The San Francisco earthquake in April, 1906, and the sensational failure of the Barings in London in November, 1890, and the unnecessary and intense hostility of the administration at Washington toward legitimate corporations in the early part of 1910, took the whole financial world by surprise, and were each responsible for a serious decline in the prices of securities. No man could have foreseen any one of these things. At any rate, the financial world did not. In this category, I do not rank the great panics which recur at regular intervals, the approach of every one of which is perfectly patent to every student of finance. I mean the accidents, the unforeseen calamities, which occur from time to time, to put to confusion the wisest men.

The point I am trying to make is, that the investment bankers pay no attention to anything except certainty of income; and without the slightest intention to deceive any one they have been responsible many times for loading the investment public with enormous amounts of securities, which afterward declined seriously in price.

A notable instance was the sale of over \$300,000,000 worth of $3\frac{1}{2}$ per cent. bonds in 1898-1900 at from \$1,020 to \$1,120 for each bond. The income thereon was, and always has been, perfectly safe; but those bonds came down after 1901 in a long, sweeping curve, like a skyrocket, until they averaged \$825 in 1907, and even now are selling to average \$865. The man who bought them above par will never get his money back, or, at any rate, not until some distant day, when interest rates on money have fallen permanently to 3 per cent.

So that the time to buy securities is fully as important as safety of income; and an investor should avoid haste and not go into securities at once, simply because he has money available for that purpose.

The affirmative side of what should govern investment will be discussed in a later article.

Do not hesitate to put off until to-morrow what cannot be done well to-day.—F. C. B.

[&]quot;NEVER let pleasure interfere with business," is a good maxim for about eight hours of the day.—F. C. B.

SOME TIME-HONORED, MISTAKEN PROFESSIONAL TEACHINGS

T. LEDYARD SMITH, NEW YORK

Any dentist who will contrast the professional literature appearing in many of the dental journals of to-day with that which appeared so constantly up to within two years, will be interested in this article. Here Dr. Smith deals very plainly with some texts which have been sung into our ears, lo! these many years. And he writes vigorously about a dental magazine which still clings to the idea that "business is a stigma." Two years ago it is probable that this article could not have been published in any of the leading journals. Now it will meet with approval from many dentists. Thus do we move, even when not wholly conscious of it.—Editor.

Expressions from many quarters show the last year to have been the eve of a splendid new era in dentistry, establishing a sane idea as to the relation of each individual dentist to his profession.

In past years dentists have been taught, mostly by men comfortably settled in lucrative practices, not to think of money, nor to consider the business side of dentistry at all: rather, look only at dentistry as a profession, professionally.

Dentists have been taught to regard dentistry as wholly professional and to ignore its twin side, Business, without which there can be no professional work to do.

To further any cult, creed or purpose, appeal is always made to the weaker side of human nature. This has been done by dentists to dentists by stimulating their professional pride to an inflation that hushed all sense, all reason of anything suggesting business. To help encourage weak pride dentists have been made to believe that anything else in an office other than professional must of necessity be commercial.

To some "business" and commerce are synonymous terms. That idea would hold one from thinking of the business side of dentistry at all, for fear of being considered no different than one dealing in a commodity, or established in trade. Such beliefs only confuse the business side of professional service with trade and commerce. With equal misconstruction they consider the conduct of a general medical practice, a strictly surgical practice and dentistry, having no differences.

That dentists must work for honor solely, for the good of humanity, without thought of compensation, is a sentiment that if held to, positively lived up to, can only bring disaster. Such sentiments belong to the same ruling that tries to show that professional decadence is due to the "stigma of business." This is quoted because that conclusion, thus expressed, found circulation in a prospectus of a dental magazine re-

cently. The prospectus, however, asks every dentist to stigmatize himself to the extent of getting one dollar somehow from his professional work and send it in with his subscription. The logic of the argument appears strained.

To convince the writer that his ideas on the attitude of a dentist toward his practice are wrong, a letter from that magazine as its argument says—" dentists must be educated and developed to a state where they may be trusted to use their best skill for the benefit of patients, from whom they know that not a dollar can be collected." The writer is not anxious about the person who wrote that letter, but does oppose most vigorously the stand of any magazine which will hold that policy, write it, spread it and falsely educate a new generation of dentists to follow a motto that is wrong, misleading, filled with hypocrisy and doubtful sentiment.

Every dentist, every physician, surgeon, artists, actor, and even merchants are doing daily things for which they expect no immediate or direct money reward. They have to. It is a part of life, and there is no complaint here that we must.

But to hold as a policy, principle or set purpose that any one of these groups must conduct their affairs and carry out its life's work in a way that gives no heed to money, to business, to the question of supply and demand with its agreeable liquidation is, to be brief, no policy at all. It is rank stupidity. It is a sham on its face. A hypocritical play toward a sentiment has no place in any serious walk of life; and dentistry is serious. Engagingly so. The actual money paid to the profession in one or many years may be shown in figures: but the good, the benefit, the service to humanity even to a promise for a generation yet unborn that, for example, will benefit from the efforts of present orthodontic treatment, this service, this benefit can not be measured. It is stupendous. It is quite difficult to imagine the state of humanity dentally and physically, were there no more dentistry. The importance of the relation between humanity and dentists is bigger than any relation between that same humanity and any one of the forenamed professions.

There have been times in past ages when a person with a serious dental defect may have been a rare example; equally rare to-day is an adult with a perfect dental apparatus. A casual glance at the growing need of dentistry shows the big serious relationship between dentists and the public. Any individual who holds the professional end of this relationship has fully his pro rata share of its burden and it is not only twin-sided, but the double parts grow. Each year develops new phases to the professional work; conditions that call for more thought and better efforts to combat. And simultaneously the business that conducts

that professional work increases, adding work and expense to the up-keep of a dental office. Together, the professional side and the business side of a dental establishment shows an ever growing responsibility. To modify and harmonize this responsibility down to a sentiment is impossible. When worked into a standard for conduct and sent as broadly as the circulation of a magazine will permit, it becomes an injury in that it teaches the young dentist foolishly to ignore the very thing that helps that dentist to have any professional work to do.

To prove to the writer that a dentist's dealings with his patients should never be marred by business or thoughts of money, an example was quoted: that of a Chicago surgeon—not a dentist—"who never knows nor cares whether he is to receive \$5,000 or five cents for any service he is rendering"—"yet, this surgeon's income is never less than one hundred thousand dollars and has been known to pass one hundred and fifty thousand dollars."

This income, equal to a five-per cent. interest on a capital of from two to three millions, has some attraction at least, since it is so fondly referred to by the authority who speaks of the "stigma of business." An income from a practice, showing six figures, makes that surgeon seem big. Naturally, a business showing that volume precludes its one active agent from personally carrying on its detail of management. He must of necessity organize such a business down to a system; deputizing its detail, and above this, supervising wisely its management. He is then left free for his professional work. To say that a man who is doing a business of from one to one hundred and fifty thousand is indifferent to whether he gets that or nothing is, plainly, a mis-statement of fact. To hold it up as a guide for a younger generation of dentists, works not only harm to any dentist who would rather not be steeped with the "stigma of business" but to those who innocently and most justly depend on him for support.

A stigma is the brand of infamy, a mark of disgrace. If to carry on the business of a dental office is a disgrace; if to charge a dollar or a thousand for honest service rendered and earned is infamous, then let us give up dentistry, for no one can escape those charges. If to state in advance of any operation that one's charges, price, or fees is so-and-so, if that is a blot and shame on one's dignity, it is then no less so if one wait until a patient has run up an account many times beyond his willingness or ability to pay, and then render an account. It is only a choice on which end of the operation one will transact the business.

When a dentist begins to conduct his establishment upon a system, as a paying organization, as a business and not as a public "service rendering vocation" and to conduct it so that "he will be justified in

collecting all the traffic will stand "he will then be doing a better public service than ever before. He can then be better equipped and keep so; and it costs money in these times to keep up to date. He will be more of a man, a better dentist, and feel morally cleaner than his half-starved, ill-advised thriftless neighbor across the street.

There is no doubt in any one dentist's mind about the difference in status or rating between dentists and, say, barbers or waiters or manicurists. But there does grow a doubt in the public mind, when a dentist conducts his business on the fee basis of barbers, waiters and so on.

To tell a dentist that his attention to money, to business is a stigma on him is no better than to pollute a babe's milk bottle. To blind a dentist with false professional pride so that he sees nothing but public service rendering and laboring for honor and the good of humanity, while his books show 30, 20 or even 5 per cent. outstanding accounts, is about as kind as sending him poisoned candy. In his lonesome office he will feel puffed up. In the street he will feel as prominent as his clothes and pocket cash will permit.

Socially, he will have no standing.

Financially, he will have no rating.

Morally, he will feel as high as the excuses he gives his wife for keeping her poor will stand.

For a man to be honest in his advice, in his dealings, he must be honest with himself and his convictions: fair to his own interests.

Otherwise, there lacks balance, justice. A dentist's observance of his own needs must of necessity be fully as great as his interest in his patient. A neglect of what is just and right for himself becomes also a cheat for his family.

That the public has a claim on dentists without any dentist first considering "what there may be in it for him" is a claim lacking all spirit of equality, or even sense.

It is gratifying, though, to see that we are on the eve of sensibly and honestly looking at the business side of dentistry.

Have a time and place for business—then keep it where it belongs.

—F. C. B.

Don't make excuses—don't have to.—F. C. B.

Don't waste the patients' time, nor let them waste yours.—F. C. B.

BE a diplomatic dictator regarding the value of your time and the way it shall be utilized.—F. C. B.

THREE PRIZES FOR THE BEST REPLIES TO THIS LETTER

For the best replies to this letter, that is, the replies telling best how to secure such assistants and retain them, The Dental Digest will award three prizes, \$12, \$8, and \$5. There are only two conditions. To receive prizes, replies must be worth publishing, and all replies received become the property of The Digest. Sign your own name; it will not be published if you say "not for publication."

Replies must be received by February 15, 1911.-Editor.

DEAR DOCTOR:

As a subscriber and contributor to The Dental Digest I write to suggest a subject which I am sure would be extremely interesting to your readers, and I think you could make it very helpful. That is, "The graduated dental assistant."

I have for years had a practice which I have felt I could not increase simply because I only had one pair of hands. I have raised my fees to the highest the people in the neighborhood will stand and pay the bills.

I have had a young, intelligent, pleasant graduate from college, after teaching him my methods, leave me in a year to take my patients and start for himself near by.

I have had an experienced graduate who developed intemperance and stole from me, and was later sued by a patient he worked for.

And now I am in the discouraging position of a man who could easily double his practice, and who would like to have enough principal put away, so that at sixty he could have an income of, say, \$3,000 a year, to provide for himself and those dependent on him, but has to stop short and discourage further increase of practice.

Now I know that the above is just what the average (successful?) practitioner has found to be the case, but I fully believe it is possible for the man who has a good chair, private office, and all facilities, and who is willing to pay an assistant \$50 or \$75 per week or more, entirely dependent on net profit the man's work can show, to get a man who does first-class work, not a thief or has bad habits, and who will not be with you to the end of starting in business for himself with your patients.

The reason I am still optimistic is that I have heard of several dentists who employ the good men I describe. Dr. — of New York City; he, I understand, has a Dr. — to whom he pays about \$50 per week and is a good man.

Another case I heard of was a Dr. — of — N. J., who has two or three men and is so prosperous that his men own auto-

mobiles and he is making \$24,000 per year. This would look better if it were discounted 100 per cent., but even then it would look good.

I also note in the December *Dental Brief* a picture of the office of a dentist in Sacramento, Cal., who, that article goes on to say, employs other dentists.

You could, it seems to me, get in touch with some of these dentists and find out from them how they succeed. Whether they can frame up a contract that the law does not consider in restraint of competition, that will hold an assistant from starting near by. Whether they simply rent office room and take part of the profits. How they get hold of the right men. How they manage to have patients satisfied to let an assistant work on them.

There is no doubt in my mind that this subject could be worked up carefully into an article that would mark one of the turning points in dental business.

Very truly yours,

W. M. THOMAS.

ELECTRIC DENTAL ENGINE CARE.—It should not be forgotten that the bearings of a dental engine need lubrication. The foot-power engine speaks for itself by demanding more muscular effort, but the electric may suffer severely and give no sign. It is, however, a delicate machine and should not be neglected nor left to the tender mercies of the office boy or girl. A little and as frequent as necessary should be the rule in oiling, and about once in three months a drop or two of absolute alcohol or benzine put into the oil-cups to thoroughly clean them out is good practice. Be careful to keep oil from the commutator brushes; they should be kept quite clean, especially if the motor is a low voltage machine.—T., Dental Brief.

To Avoid Irritation of Cement when Setting Crowns.—Very often the mounting of crowns or bridges with cement causes considerable pain, and this can be avoided to a considerable extent by coating the outside of the bands at the gingival portion with vaseline. This allows the cement to slip away from the gum margin, thus avoiding its irritating effect.—R. E. MacBoyle, Chicago, *Dental Brief*.

EXPERIENCES

Editor Dental Digest:

Under the heading "An Ethical Advertiser" in your current number, "N. J." says among other things, "I am an advertiser. I am ethical. Therefore I am an ethical advertiser."

Let us examine his claim. A dentist's obligation is threefold; first, to his family or dependents, second, to his patients, and third, to his confrères or his profession.

I understand an ethical advertiser to be one who is truthful and conscientious and I would not, therefore, class him with the conscience-less charlatan who boasts of qualifications he does not possess. But, granting that "N. J.'s" conduct is correct toward his dependents and toward his patients, does it not occur to him that there is something like foul play in his conduct toward his confrères when he employs methods in the conduct of his practice which they do not and will not employ—it being generally agreed among them to not employ such methods? Is not his position rather analogous to that of the "game-hog" among sportsmen? He is in the game, or claims to be, and does not play it according to the rules of the game.

Judging "N. J." by his letter, which is all I have from which to judge him, I take him to be truthful and sincere and a very decent sort of fellow; but he is only two-thirds ethical and one-third unethical. As to the *firstly* and *secondly* he will *do*, but as to the *thirdly* he is found wanting. He has lined up with the wrong bunch. Where among that bunch are such men as Miller, Black, Kirk, Brophy and scores of others? Where is there a contribution worth while to the literature of dentistry from the pen of an advertiser? Why do they not have societies of their own for mutual benefit, good-fellowship, etc.? Why are they always against one another as much as they are against the rest of us?

These questions are not asked for the purpose of invidious comparison. Like the Japanese school-boy, "I inquire to know." Of course everybody knows it pays to advertise. We should do more of it, but with a sharp line of distinction drawn between advertising ourselves and advertising the good we can do.

To "N. J." I would say, get together with the other men in your locality and form a local society. Join hands in an educational campaign as proposed by Dr. Ebersole. Go to your newspaper men and explain to them your purpose. Don't try any skin game on them, but approach them through their business offices. Don't try to tell them it is all pure philanthropy on your part, for they will know better. Tell them that you want to benefit the public and that you may help your own business

in the bargain. It will take them less than a minute to see a difference between your program and that of the "painless," "twenty-year-guarantee," "four-dollars-a-set" charlatan.

This is the only legitimate way to meet the fakes. "Fight the devil with fire." Fight the fakes with publicity. It is as easy for them to humbug the public as it is to take candy away from a baby. The public do not understand. They need to be taught. If we do not teach them who will? Fill all the space in your newspapers you care to pay for with such matter as will interest and benefit the public, but keep your names out. If your "copy" has a real value as reading matter your paper will likely make but a small charge for publishing it.

As a result of such a program, instead of one person in every ten giving intelligent care to the mouth and teeth, there should soon be many times that number, and if you do not come in for your share of the increase of business it will be because there is something wrong with you and you do not deserve it.

Being an ethical gentleman—that is honest and truthful—if you are a competent dentist and of good address, have a well-equipped office and a neat (not gaudy) sign to guide people to it and have a card in your newspaper, all of which are allowed you by the strictest society members, you should get on well enough and have no recurrence of that old grouch.

J. R. L., Kansas, U. S. A.

December, 1910.

Editor DENTAL DIGEST:

Nearly thirty-four years ago I commenced the practice of dentistry; I was then twenty years old. In a small town people are not educated to have their teeth saved. A tooth that had given trouble was extracted—no teeth treated—no teeth crowned—placed no bridgework. If teeth gave trouble they were pulled out and I put in a plate. My predecessor was a great plate maker. I worked a long time before I could place a porcelain crown; had to promise to take it off and return the pay any time within three months (though I never had to take one off). I got and get now small prices for my work. Have built a home valued at \$6,000. Kept my family, consisting of wife and son, and have something in the bank. I think I earn my money easier than many, and while I am not satisfied with the money the business brings in, I feel I am doing better than many of my boyhood friends.

I like the business well enough, so I have sent my son to the University of Pennsylvania to study for the profession of dentistry. I believe he can do as well in it as any honest man can in any legitimate business. I believe the time is near at hand when he can command more

adequate return for our labor and skill. I say we, as I guess I am about out of it myself, but I want to live to see my son well established in a lucrative business, then I shall be satisfied. What with savings, home, and insurance, I think I can leave my good wife in fairly good circumstances. I do not think it right, wise or necessary to cry down our profession. To my mind dentistry is as much ahead of the medical profession to-day as that profession was ahead of dentistry thirty years ago.

Some have written that a dentist ought not to work over seven or eight hours a day—from nine to twelve and from one to four or five. How can you expect so many places to get the prices to make your income \$2,500 over and above all expenses! It would be better if all would take the optimistic view and you will see the dentist is not very badly off. I just prepared and filled a large approximal cavity in the right superior central. It has taken me exactly one hour and thirty minutes. I get \$6.00 for it. To-morrow I will prepare two bicuspids with dead pulps and put on two porcelain crowns. I don't know just how long it will take. I will get \$5.00 a piece for them. I don't see how, in a small town where everyone knows everybody's business, you can do work (similar) for one patient at a price different from that which you do for another. I cannot do it. For Mrs. S. will say, "You did work for Mrs. J. for so and so, why not for me?"

It won't work in a small town, and I do not believe it is those who do that who advocate the "no set price." It must be some one who either is in a large town or does the most of his dentistry on paper.

I am not saying I am satisfied with my prices, for I am not. I have raised some and would like to raise some more. My plate work troubles me the most; I take a lot of pains with it and want it right and only get \$10.00 for platinum or rubber; this includes the extracting, but not the anesthetic. I get from 50 cents to \$1.00 for plastics, including amalgam, \$2.00 and up for gold fillings. Do very little inlay work. People not educated to it yet. Do a business of \$2,000 to \$2,500 per year and will be satisfied if I can keep it up a few years longer. Last year was the best as to collections I have had. You will understand that in my method of bookkeeping everything I do goes into cards and into card system; but I do not call it business done or as figuring in my year's business until it is paid, so when I say \$2,000 to \$2,500 a year I mean I collect that amount. I don't figure on any work done and not paid for. It's hard to collect anything that is sixty days on my cards. Have had some experience with so-called collection agencies. I advise you to let them alone. They make such terms that the little you get through them will be lost entirely. They swallow it all.

GREEN MOUNTAIN.



NEW YORK.

My Dear John: I'm going to leave this town next week, before I develop too severe a case of New Yorkitis. Probably you don't know what New Yorkitis is, and I don't know as I can tell you, but I can give you a rough description of the progress of the disease. When an uninfected person with a little money in his purse lands here, he notices several pertinent facts. These are either symptoms of the disease or its effects. They run something like this:

First. Everything costs twice as much as it does anywhere else. Second. Many people are constantly buying regardless of the costs. Moreover, they seem happy in doing it.

Third. While the business sections of the city are busy enough during the daytime, certain other sections are nearly asleep. But about the time you and I think of retiring, these sections wake up and are the gayest of all. It seems as if the people had been working all day just to get to this time.

It is wonderful how easy it is to become inoculated with this disease. You go to a really good place to eat. The prices on the bill of fare give you a shock. However, you think it will be all right to do it this once. It will be something to remember and tell about. Maybe you get the inoculation through the food or the music or the flowers; it is pleasant and painless and you do not realize it. But when next you seek to dine at a less expensive place this bacillus gets in its work. The food seems to be not so good, or so well served, or something is wrong. You dine a second time at the expensive place. This time the sense of enjoyment is greater and the shock is less. The antennæ of your financial sensorium are now a good deal deadened. You've gotten the habit.

It is just the same about going out nights. When you've gone a time or two with some of the really delightful people here, the thirst gets into your blood. You'd rather sleep in a car going home than not to go at all.

People who have had this disease up to the time of their deaths, and on whom post-mortem operations have been performed, are said to show some interesting brain changes. The centers for self-denial

and economizing are found to be much atrophied, while the pleasure-loving and money-spending centers are much enlarged.

I've been spending a week with Jim B——, and have had the time of my life. Jim has had New Yorkitis so long that he doesn't know



it from a state of health. I got a glimpse of what it has done to him this afternoon, and that's what decided me to leave here soon. I don't believe this disease can flourish at home. Those brisk Western breezes will blow it away, and the sense of truer proportions that God gives men when they get back nearer to nature will sound its death knell. At least I hope so, because I'm infected; and already it is undermining the props of my self-denial.

Last Monday night Jim entertained with a theater party and a

dinner following. I faced it complacently because I thought my clothes were all right. But when I saw Jim in his dress suit I wished I had declined. He made me look like Brother Hayseed from Sagebrush County. And Mrs. Jim took my breath away. You see the disease had me so far in its grip that I saw and enjoyed all the beauty. Once or twice since I have thought how glad I am that she isn't Mrs. Bill, because if such gowns were the regular course of events for Mrs.



Bill, I see where I'd walk to and from the office so as to pay the tailor. We had a box at the theater and met some other equally well dressed people. Then we went to the Hotel Knickerbocker for dinner. There were a good many people waiting at the entrance of the diningroom. They all had this same disease I've been writing about. I had it, and I knew it when I saw it. The beautiful gowns, the jewels, and the general gala air were easily read and agreeable symptoms. A few infecters in the form of lackeys were running round scattering infection so that no one should escape.

No sooner had we reached the door than Jim was recognized. We were conducted to a table set for six and service began at once. When

it was over, a slip was laid at Jim's plate. He wrote a check in payment, and it was accepted without question. We were shown to carriages and came home.

I'd learned a bit about New York and several things struck me. First Jim is well enough known in this circle to be recognized and have his check taken without question. At home, where I know every prominent hotel man by his first name, that wouldn't be worth comment, but when you've been in New York two weeks, you'll appreciate it better.

The next day was a holiday, and as we sat smoking after dinner I said, "Jim, I had the time of my life last night, and I want to thank you again for it. We've been friends since the days when both of us were so poor that we had to make two dollars last us through a week in the college operating-room. You will not take offense when I ask how you do it?"

"Why," said Jim, "that's easy; the practice pays for it." From this we fell into talk on the possibilities of practice in a city like this and Jim gave me some figures.

"My practice," said he, "brings in about \$16,000.00 a year. I've got it all laid out in such way that I have a nice little sum annually to invest. Here's how I do it."

Office.	House.	Pleasures.					
Two girls. 1,500.00 Light 100.00 Supplies 1,200.00 Sundries 1,000.00 Phone 100.00	Rent \$1,400.00 Cook 400.00 Two girls 300.00 Table 1,200.00 Clothes 600.00 Sundries 1,000.00 \$4,900.00	Theaters 300.00 Dinners 200.00					
\$5,900.00	Total \$13,000.00	\$13,000.00					

"You see that this leaves me \$3,000.00 a year to invest, and I am careful to put it away. In that safe I have nearly \$30,000.00 worth of securities. I'll show you." He brought out a large bundle of imposing-looking papers and threw them into my lap. "Look them over," he said, "and tell me what you think."

They looked mighty prosperous, but I noticed there were no securities I knew anything about. You know that in the Safe Deposit Vaults at home there is a little sheaf of securities, and that twice every year I have a pleasant quarter of an hour cutting the coupons and getting the money on them.

So I looked over Jim's list with interest. I noticed land investments, oil, rubber, mines, banana stock and others.

"Well," said I, "these ought to bring in a nice revenue annually



if they're as big income producers as I have been told such things are." You see I didn't think much of the list, but I didn't dare say so.

"They haven't produced much income as yet," said Jim, "but they ought to. In fact, I've had to use up my surplus for a year or so to pay the assessments." I noticed in the list, land \$2,000.00. "Where is this land, Jim?"
"O, that's over in Long Island. I expected to make a big thing in that, but the railroad didn't go where it was first surveyed, and I haven't been able to sell it. There's one hundred lots in that bunch, but no one seems to want them. The best offer I could get was \$400.00." "How much are the taxes?" "About \$100.00 a year." "So between lost interest and taxes they cost you \$220.00 a year to carry. Any town near them?" "Not now."

"What about this oil stock \$1,200.00?" "That isn't doing as well as before I bought. The company has struck some 'dry holes,' and it seems to have consumed all the capital. I haven't paid my last assessment yet, and don't know as I will."

So we went through the list, nearly \$30,000.00 in all, and not an income producer in the lot. In fact, some of them represented loss in the way of expense.

"Jim," said I, "how did you ever come to buy these? Why didn't you buy standard securities?"

"Bill," said he, "did you ever know where I got the money to go to dental college?" "No." "Well, about a year before I went, I invested \$100.00 in a mine, and a little later sold out for over \$800.00. That paid most of my college course. A year afterward I made some more. If I can do that once or twice on a larger scale, I'll be fixed." "Have you done it?" "No, luck seems to have left me. There's my bunch of efforts. They all looked big at first, but they don't seem to produce. I have some other assets though. There's my office furniture and the house furniture and my car and the launch."

It was all so pitiful I couldn't look at Jim. I had to keep my eyes elsewhere. The notion of calling an automobile or a motorboat an asset would have been funny if Jim hadn't been my friend. They're luxuries of the most expensive order.

"Jim, how old are you?" "Forty-six." "Well, you've got about a dozen years of practice ahead of you. Why don't you quit throwing away money on this sort of thing and buy sterling securities that pay fair interest and will always find a ready market?" "I believe I will," said he. "Yes, I wish I had long ago."

There the matter dropped, but I want to give you a hint or two based on this experience. You're making money now and I judge you're saving some. There are certain stable bonds and stocks, about which any reliable investment house will give you all the details. They pay relatively low rates of interest, but they pay; and they are not continually calling for assessments. You can put the certificate in the vault and every first of January and July you can cut a coupon



and get some money back. If at any time you need ready money, you can get it without much loss, either as a loan or by sale. Such stocks or bonds will help you become financially independent.

If ever you're tempted to buy the kind Jim has, take the money and buy candy or give it to the poor or travel about the world, because then it will be gone but not lost. It will do somebody good. But money spent for such wild-cat securities benefits only the shark that sells them, and who, even during the transaction, despises the sucker to whom he sells them.

You've spoken once or twice about the advance of real estate at home. If you knew as much about the real estate market as you do about making an inlay, you could make more money than you make now. As the result of a sting or two I've had, let me suggest that before you go in you consult some reliable real estate man and pay for his advice. For while the land may not move away, everything that gives it value may, as it did in Jim's case.

The point of the whole letter is this. Your investments will never be very large. You'd better make them very carefully if you want a comfortable old age. And you'd better get some reliable expert to advise you as to what the outcome is likely to be.

This bundle of practically worthless securities marks the other side of New Yorkitis, as seen in Jim's case. It leaves him at the age of forty-six with practically no assets except his life insurance. Now he must begin again where he might have begun years ago.

I'm going back home. I'll be glad to get there. The hotels are not so fine, the life is not so gay. But it's a saner life. Values are truer. It's easier for me at least to exercise self-denial. And I can save more money and put it into shape so that I can get it in case of need.

Look for me in a week.



DENTISTS THERE

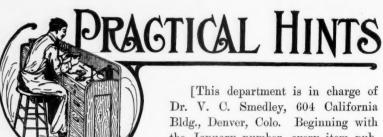
"Success in the law," said Joseph H. Choate, at a dinner at the Lawyers' Club in New York, "often depends on the ability to meet every objection readily.

"A clergyman, however, once carried this ability a little too far. He was addressing a prayer meeting, and in his description of the doom of the wicked he said: 'And there shall be weeping and wailing and gnashing of teeth. Aye, gnashing of teeth.'

"A very old woman spoke up in a quavering and senile voice:

" 'But I ain't got no teeth, pastor.'

"Then, madam, they will be provided,' was the answer."-New York Press.



Dr. V. C. Smedley, 604 California Bldg., Denver, Colo. Beginning with the January number, every item published in this department will pass through his hands, and to avoid un-

necessary delay Hints should be sent direct to him.]*

AN EXCELLENT BUFFING WHEEL FOR LABORATORY LATHE.—An excellent buffing wheel for a laboratory lathe is made by folding soft flannel cloth to about the thickness of one inch, and about six inches in diameter when cut round, and binding all together with small soleleather disks with holes in center for screw chuck.-V. C. S.

FOR PICKING UP AMALGAM SCRAPS.—A good way to pick up amalgam scraps that have fallen upon the moist tongue or the floor of the mouth is to take a ball of dry cotton an inch in diameter and wipe briskly over the surface. The pieces will cling to the fibre.—W.

To Stop Hole Accidentally Perforated with Instrument.— The rubber dam accidentally perforated with an instrument can have the hole effectually stopped, if it be on the lingual side, by taking an elongated cotton pellet dipped in sandarac varnish and push through the opening, allowing the cotton to protrude one-fourth of an inch on either side of the rubber. The cotton having a little greater diameter than the perforation will be held in place by the tension of the rubber. Or if the perforation be on the labial or buccal aspect a roll of cotton the size of the finger or thumb can be placed under the dam within the lip and it will stop all oozing through the aperture. Occasionally change the roll if it becomes too saturated.—W.

* It is our intention to publish in this department nothing but hints of a brief, terse, practical nature; ideas and methods of procedure that are not theory, but an actual part of the daily practice of competent men.

Do not hesitate to describe for us and sign your name to the simplest or most common-place thing that you do, lest it may not be new to everyone or may possibly have appeared in print before. If it is a part of your daily practice, it is yours; and worthy of your signature. And if it helps you to serve your patients well, and to earn your daily bread, it may do as much for other men.-Editor.

FOR ASCERTAINING ACCUSTOMED SURFACE IN MASTICATION.—When it is desired to ascertain the favorite or accustomed surface the patient utilizes in mastication, especially with fibrous food, take a ball of cotton the size of the thumb, roll it tightly and ask him to chew it as he would a piece of meat. He will immediately and unconsciously diagnose for you.—W.

To Avoid Necessity of Ligaturing.—The rubber dam placed over four teeth in succession rather than two, the edge of the dam around two central teeth inverted toward the gum by a small flat instrument and sealed with sandarac varnish, will avoid the necessity of any ligatures being tied, which inflicts distress upon the patient.—W.

FOR HOLDING DAM IN PLACE UPON MOLAR TEETH.—To hold the dam in place upon molar teeth without the clamp, take floss silk and pass three or four strands through the teeth to the rear, forcing the dam down. Allow the excess ends to extend out and be held by the cheek clip of the dam holder, or cut them off lingually and bucally one-half inch beyond the tooth.—W.

Wax Dummies.—To make your wax dummies for cast bridgework, take any of the die plates where you have the bicuspids and molars depressed, select the one or ones to suit your case. Then having the mould wet you can press the warm inlay wax to place, getting cusp and body, which can be trimmed to suit both the model and articulation, with but little trouble. Making each dummy separate you can articulate, and join together with a warm spatula to cast, or cast separate.—E. B. Hill in Summary (from Dental Register).

Thumb-Sucking, to Prevent.—Take a good quality hollow rubber ball about three inches in diameter, cut in a circular hole large enough to admit the baby's hand, and place it over the hand. The ball should be well perforated for ventilation and lightness. It can be kept clean and does not interfere with the child's activity.—Dr. William A. Jacquette, Philadelphia, Pa., Dental Brief.

LINING CAVITIES TO PROTECT PULP.—Line all cavities with oxyphosphate that are large enough to contain this extra material, this being done to protect the pulp, stiffen weak walls and keep the color of the tooth; do this before placing the matrix. A good way to line cavities is to place the cement, then press it home with a pellet of unvulcanized rubber, holding the rubber in place until the cement sets a little; this insures the cement touching all parts of the cavity without air spaces.—Dental Brief.

A FIRMER CLASP.—In those cases where it is desirable to place a firm clasp upon a bicuspid or molar tooth, which is to be protected by a crown, I have found this method satisfactory. First, trim the stump and fit the gold band to it. Then fit the clasp to the band. In making this clasp the occlusal lap has a short cone-shaped dowel attached to the end nearest the center of the clasp. Remove the clasp and place the





band in the mouth or on the model. Fill with inlay wax. Then oil and warm the clasp and place in its proper position and take the bite.

The band, wax and clasp should be removed together and chilled with cold water. Then, with the clasp still in position, trim the wax cusp to the desired shape, allowing the clasp to become a part of the







cusp. The clasp should be carefully removed. The embryo crown will then resemble Illustration No. 4. The sprue is attached and the crown invested and cast as usual. When the crown is finished and the clasp set in place, the case will resemble Illustration No. 5.

The advantages of a clasp of this kind are first, its firm grip and great strength, and second, the smooth finish of the occlusal surface, allowing a perfect occlusion. There is no irritation to the tongue and particles of food do not gather under the occlusal flap.

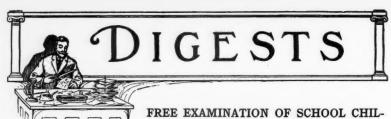
REA P. McGEE, M.D., D.D.S., Denver, Colo.

LINGUAL SURFACE OF A VULCANITE DENTURE.—In an article on constructing vulcanite dentures, in *Le Laboratoire*, July 18, 1909, page 538, Mr. G. W. Rose suggests that an upper vulcanite denture will feel more natural to the tongue, and be more practical and useful, if the lingual surface is made to resemble that of the mouth with all the natural teeth in place. The conventional form, a smooth, even, polished

surface, he contends, does not permit the tongue to properly perform its functions, either in speech or in mastication. He recommends reproducing the ruga, on the trial plate, and, when preparing the case for flasking, carving the lingual surface of the wax supporting the teeth to the form of the natural teeth. This will give much more room for the tongue, and the lingual surface thus formed enables the tongue to assist in the function of speech and mastication to a much greater extent than when this surface is made smooth and even. To overcome the difficulty of polishing this irregular surface he makes moulds of "stent" (a modeling compound much used in Europe), by means of which he stamps a piece of thin, soft metal, for instance, thick tin-foil, to accurately fit the carved wax surface. This is made to extend over the front teeth to a little beyond where the vulcanite will be, and partly over the occlusal surfaces of the bicuspids and molars. This is placed in position when the denture is flasked, and forms part of the mould into which the rubber is packed. If this is neatly made, and nicely cleaned and polished just prior to packing, it produces on the vulcanite a dense, hard, polished surface that needs no after finish.—The Dental Brief.

Casting Gold Inlays.—For ordinary inlays I use a common brass pin cut into pieces about three-eighths of an inch long for the sprue post. Heat one end of the sprue pin and insert it in some convenient place in the wax inlay that is in position in the cavity, chilling both pin and wax at the same time. Then, with a pair of stout pliers, grasp the sprue pin and withdraw the pin and wax inlay-being careful not to twist the inlay nor mar the margins. Then place the sprue pin in the wax cone ready for the investment ring. I take the suction carver and remove all of the inside of the wax inlay that I conveniently can, being very careful not to disarrange or melt the margins of the wax inlay. Here I wish to say that this little device is one of the greatest schemes in all the whole operation; it serves a threefold purpose: It makes a piece of work (after it is made) lighter; it gives cavities or places for the cement to lodge without being exposed to secretions, and, third, it is a great saver of gold. But I do not mean the saving of gold to the detriment of the work, for my experience, as well as observation, has taught me that the more of the inlay (especially large ones) you cut away—making them hollow—the better the work.—The Dental Brief.

FAILURE is the foundation of success, and the means by which it is achieved.—From "How to be Great," by Lao Tzu.



FREE EXAMINATION OF SCHOOL CHIL-DREN'S TEETH—WHAT ORAL HYGIENE MEANS TO THEM *

By F. B. Hicks, Brookline, Mass.

* * * * * *

I have been asked to tell you something about the work that the dental profession of Metropolitan Boston is doing in the public schools.

It was first necessary to arrange a convenient chart, in order to record the results of the examinations. After considering several sorts of charts, one used in the ledgers made by the Ransom & Randolph Co. was selected. In this chart each tooth has a number, and each surface of a tooth a number, and by using a large number to designate a tooth and a small number as an exposent to a surface of a tooth, the position of a cavity could be quickly recorded. Three adjustable headrests were purchased and attached to ordinary cane-seated chairs, which made very good examination chairs. A number of mouth mirrors, explorers, pliers, a box of mouth napkins and absorbent pellets, and a suitable boiler for a sterilizer completed the outfit. Three men were called in as examiners and plans made to examine three hours at a time, from 9 to 12 A.M. The operating chairs were placed at suitable intervals in a row before a long wooden table. On the table by each operator were placed napkins and clean instruments. On the other side of the table, facing each operator sat a pupil who made the records. There were three operators, three clerks and one pupil who sterilized the instruments. The pupils came into the examination room, each with a record card, the name and grade filled in. This card was handed to a clerk and the patient sat down in the chair for the examiner, who had previously washed his hands, to proceed. When a cavity was discovered it was called off to the recorder and placed by number on the record card. When the examination was completed the examiner carried the used instruments to the sink where they were washed and sterilized by the attendant. The examiner washed his hands and went back to the chair where he found another patient ready.

^{*}Read before the New Brunswick Dental Society, July 12th and 13th, 1910, at Moncton, N. B.

By thus systematizing the work, great economy of the time of the operator was effected.

A mouth was rated in good condition where there were no readily observable defects; and in fair condition where there were several small defects or one or two sizeable defects. Other mouths were rated in poor condition.

As a result of the examination held in this school the following classification was made:

	P. C.
Mouths rated in good	$condition.\dots\dots.131 - 18.44$
Mouths rated in fair	condition217—30.83
Mouths rated in poor	condition357 - 50.73
Pierce School, April, 1906.	

Having ascertained these facts, the next thing was to undertake a betterment of the condition of the mouths rated as "Fair" and "Poor." To this end a notice to the parents was devised which read as follows:

Office of School Committee,
BROOKLINE, MASS., 19

NOTICE TO PARENTS:

A good deal of thought was given to the exact form of this notice. It did not seem best or necessary to give the parents a record of defects found or to tell them whether the teeth of their children were rated as "Fair" or "Poor." It was borne in mind that many of the children were under the care more or less regularly of a nearby practitioner, and that a notice sent to the parents stating that the child's teeth were in poor condition would be unfair to the practitioner, who would be held responsible for the condition, even though the parents had been negligent in arranging for regular professional care.

The next step was to interest the children in the care and use of their own teeth. To this end the following rules were devised and given to every scholar examined:

DIRECTIONS FOR THE CARE AND USE OF THE TEETH

- 1. The teeth should be thoroughly brushed after each meal.
- 2. A tooth powder used on the brush helps to clean the teeth.
- 3. Candy and crackers should not be eaten between meals; they cause the teeth to decay.
- 4. The slow and thorough chewing of hard food helps to preserve the teeth and keep the mouth in a healthy condition.
- 5. Children's teeth should be examined by a dentist at least twice a year.

The school committee of the town of Brookline was so impressed with the value of the examination of the teeth, that they decided to make it an established policy.

The second school placed under examination was the Lincoln Grammar and Primary School. Many of the pupils in this school come from the poorer sections of the town. As one of the examiners I remember having examined fully fifty pupils in succession without being able to give one a good mark. The result of this examination was as follows:

Mouths	rated	"Good "	 		 	 		 	.32-	- 5.5
Mouths	rated	"Fair".	 	 	 			 	211 -	-36.4
Months	rated	"Poor"	 	 	 	 		 	336-	-58.1

The condition of the teeth was so bad and showed such a lack of appreciation on the part of the scholars and their parents of the value of the teeth, and such a lack of knowledge of how to preserve them from decay, that Dr. Potter proposed to the School Committee that an illustrated lecture be given to the scholars and their parents upon the value and the care of the teeth. This proposition met with favor and the lecture was given. The speaker undertook to impress the great value of the teeth in the process of digestion and assimilation of food; to describe how decay of the teeth came about through lack of cleanliness. How decay caused loss of function and much incidental pain and inability to work. Methods for preventing decay through the maintenance of cleanliness were clearly shown, and the part played by the dentist in the repair of lost substance stated. The greatest stress was laid upon the value of the teeth, and the possibility of preventing their loss by systematic prophylactic measures.

The problem of repairing the defects in the teeth of school children is one that seems rather discouraging. By educating them in this preventive treatment we surely must see results in the future in the form of a cleaner mouth and carious teeth very materially lessened.—The Dominion Dental Journal.

MOUTH HYGIENE STORIETTE

This subject was discussed at a Mass Meeting at Convention Hall, evening of November 10, 1910.

There are few dentists familiar with the work which The Rochester Dental Society has done for the children of that city who do not yield it high praise. For Rochester was our pioneer city in what we now call The Oral Hygiene Campaign, and it may be questioned whether she is not yet the leader.

For the nine days preceding the Oral Hygiene mass meeting in Rochester November 10, 1910, six daily papers in that city gave space to dental copy under the general heading "Mouth Hygiene Storiette." Whether or not this was the effective cause, the meeting was attended by a large audience of interested listeners, many of them parents accompanied by children.

Our readers may be glad to have these Storiettes to send to their local papers. So we print eight of them, four this month and four next.—Ерітов.

THE STORY OF TIM

BY A MEMBER OF THE ROCHESTER DENTAL SOCIETY

HE was christened Timothy, but the kind-hearted neighbors soon abbreviated this to "Timmie" and later it was "Tim" and this seemed to please everyone including his fond parents who lived on the "Avenue," very close to a big bake shop where one could get the benefit of all the delightful odors that came from the oven.

Tim was the third baby, but the only one living; those who came before had succumbed to unsanitary milk and trying second summers, with teething ills and other incidents to unsanitary surroundings.

His mother was very fond of him and so, too, were the neighbors who called and who were very free with their advice, but Tim's mother had learned by sad experience that crackers and beer or cold potatoes were not the best food for a newly arrived baby, and procured his milk at a nearby station and was reasonably careful in sterilizing his nursing bottles.

Tim was such a fat and rosy baby and weighed just ten pounds when he first came into the world. The immediate business of this little specimen of humanity seemed to be in the eating line. His parents were both healthy and little Tim soon developed an appetite that would have done credit to a hired man and paid strict attention to his job of putting on flesh; for Tim had a big contract, he must double his weight within a year; if he failed in this, he would join his predecessors with a "gone before sign" and his name in the big family Bible.

Suppose that you, a healthy man, weighing 150 pounds, were told

that you must double your weight within a year; don't you suppose you would commence to store away the necessary food for such a problem?

And Tim was busy, he was ever at the lunch counter and seemed to be little more than an animated mouth with a stomach and digestive system. He nursed from the bottle, went to sleep and awoke with a cry that was couched in one word; like unto "Oliver," he was always asking for more.

Tim had the scarlatina and numerous stomach disorders, these latter attacks followed generally when his fond mother chewed some delicacy in her own mouth and placed it in his. His being, for good or evil, was determined by his weight and the family scales became almost a shrine to the anxious parents.

Once having doubled his weight, he must do it all over again and having successfully passed that trying period, the second summer with its teething terrors, he has, after a time, twenty good sound teeth to help him double his weight again. He has long since graduated from the lunch counter and now sits at the family table and takes his meals, fortified between times with cookies, milk, bread and molasses and other delicacies of childhood.

At five years of age he weighs fifty pounds and enters the kindergarten; now is the time when he needs those twenty teeth, needs them bad, as he must not only go on developing in weight, but also provide for his mental equipment as well. His mother has been careless in not taking care of his baby teeth and he does not know that they should be kept clean and brushed at least twice daily; they have been allowed to decay and he is seriously handicapped in the struggle for existence.

He ceases to put on weight. How can he gain? His teeth are decayed, they ache and keep him awake, are painful to use and he hates to chew on them, so lives on soups and mushes. The decayed teeth ulcerate and slimy yellow pus or matter is thrown off and contaminates every mouthful of food he swallows.

Over twenty varieties of harmful germs have been found in the human mouth; he doesn't have them all, but he has a sufficient number to keep him miserable. The pus secreted, not only contaminates his food, but alters his gastric juices and makes them useless for the purpose they were intended. He becomes puny, his vitality is lowered, and while a body in health can consume a great number of harmful germs, Tim, with his lowered physical condition, is a prey to them all and has one thing after another.

A clean mouth is a safeguard against disease; a clean mouth turneth away trouble is as good a proverb as "A soft answer turneth away wrath."

Tim's poor little mouth has been neglected and he has a dozen or more cavities in as many teeth. His tonsils are swollen and enlarged. As one of the results of a dirty mouth, adenoids make their appearance. Adenoids are a growth in the back of the throat and he finds it impossible to breath through his nose and must of necessity keep his mouth open to breathe; his blood is impoverished, he isn't getting his supply of oxygen to keep it pure and it is further contaminated with every breath he inhales through his unclean mouth.

At this trying period he has that most dreadful of childish diseases, diphtheria; with a mouth diseased, enlarged tonsils, adenoids and a lowered physical condition and no teeth worthy of the name, his chance of recovery is one in a hundred. He is hurried to the hospital and thanks to a strong constitution, which he has inherited with his other evils, he manages to pull through. For a long time he is little better than an invalid. The doctor, who comes every other day, examines his tongue and pulse, shakes his head and talks about country air and nourishing food; it never occurs to him to look at Tim's teeth and mouth as a cause of his troubles, but prescribes "Tonics" galore.

His natural defences are weakened and his hearing becomes impaired as the result of the adenoid growths shutting off the supply of air to the ear passages, the faulty digestion reflects on the sensory nerves and his eyesight is impaired. He becomes peevish, cross, fights his playmates, and is a general nuisance to himself and the family, who despair of ever rearing him.

Tim's parents do not know that these adenoid growths can be removed by a comparatively simple operation, and his face soon takes on an idiotic stare, with mouth continually open. Did you ever try breathing through your mouth for ten minutes? Try it and see how Tim was suffering. His nose, intended to warm the air and prepare it for the delicate structure of the lungs, becomes a useless ornament. The nose has a still more important function; it is meant to screen the dust and catch the germs flying about so they shall not enter the lungs. He is without this natural defense also.

Ninety per cent. of the diseases flesh is heir too are introduced through the mouth; and he is lacking in any defense through his disregard of the simple rules of Mouth Hygiene.

As a result of his inability to chew, Tim loses the use of his muscles of mastication and his jaws cease to develop and grow. When his permanent teeth appear they find a baby jaw and no room for a man's teeth, so they crowd themselves in as well as they can. The baby teeth being decayed, the roots are not absorbed and they are allowed to remain or are painfully removed. They make a bad condition worse by taking up the

space intended for their betters and the incoming teeth are irregular and add to the evil appearance of Tim's face. If his parents had the money his teeth could be regulated and the jaws developed, but they are too poor and ignorant and his face is very unpleasant to look upon.

Tim's mother is very careful that his food shall be prepared in a cleanly manner, the kitchen utensils are bright and shining. The dishes from which he partakes his meal are sure to be clean and thoroughly washed before each meal.

But to what purpose? This food must pass through a mouth that is like a cesspool and contaminates everything it touches.

He has been taught to wash his hands and bathe his body, but his mouth, the very vestibule of life, has been left wholly without care; but his clothes, they are clean and neat. His poor, ignorant and fond mother has decked him out in his best. His poor little mouth has been neglected until it looks like a burnt district and is repulsive in the extreme. To his mother Tim's mouth was a sealed cavity and she never thought of examining it until disease manifested itself in aching teeth and this was accepted as a disease that was passing, like unto the measles, to be suffered until such time as nature replaced them with a second set or in the case of the permanent set, to be replaced by the dentist with an artificial substitute.

When Tim graduated from the kindergarten, his troubles had not secured such a hold and he commenced his studies in the big school-room with a bright and smiling face; he was "free and equal." He did not know it, but his was an equal chance for pain and suffering.—The Union and Advertiser.

(The next installment of the story of Tim is expected to appear in the February issue.)

NEW JERSEY STATE DENTAL SOCIETY MEETING

* * * * * * *

PRESIDENT DILTS then introduced Dr. William Gray Schaufler, of Lakewood, N. J., Vice-President of the State Board of Education, who delivered the following address:

ADDRESS BY WILLIAM GRAY SCHAUFLER, M.D.

DENTAL INSPECTION OF SCHOOL CHILDREN

I do not want to take up much of your time this morning, but your colleague, Dr. Hawke, who was with me on the State Board of Educa-

tion, asked me to place before you in a few words the important work we are trying to do in the way of compulsory examinations of school children in this State.

New Jersey is the first English-speaking state or community of the world that has practically compulsory medical inspection or examination of school children. England has had medical inspection for eighteen months, and Massachusetts for about two years, but in neither of them is there a penalty attached to the law. New Jersey was long before them in having medical inspection of schools, but it was not obligatory until two years ago last winter, when a law was passed making it compulsory in all communities.

During the first year of this work, ending June 1st of this year, the Medical Inspection Committee of the State Board of Education, of which I happen to be the chairman, felt that we should go very slowly and not force the matter. Many communities had made no provision for funds to pay the medical inspector, and while a good many of the districts in the State were lax in this way, all had shown more or less interest in the matter. From next September, on, we expect that every school district in the State will have a properly appointed medical inspector, whose duty it will be to see every school child once during the school year, and examine for defects, and during the rest of the year care will be taken to see that the advice of this inspector is followed.

The part which interests you most, of course, is the examination of the mouths and teeth of these children, and if I can interest you sufficiently to get your coöperation in this very important work, I am sure the few minutes I spend here will be very well repaid.

Dr. Hawke will pass around a little printed paper containing the rules relating to medical inspection, as amended by the State Board of Education, June 14, 1910, and I shall be very glad if every gentleman here will see that he gets one of them and will study it. Among the rules which are obligatory upon the physicians appointed as medical inspectors there is one that refers to your specialty.

I refer to Section 4, sub-division d. "Teeth, condition and care." The rule says:

"At the commencement of each school year the medical inspector shall arrange to make a systematic examination of each school child in his district. This shall comprise a thorough examination of," and then it goes on to designate the eyes, ears, throat, teeth, etc.

By "thorough examination" is meant that the examining physician shall look into the matter and advise—not advise the parent what should be done, but simply seeing a wrong pathological condition of the

child's mouth, he shall, on a card, report to that child's parents that the child needs the attention of the dentist, in that way directly referring the child to one of you gentlemen.

As we know, in our branch of the profession, it is very easy to advise as to what shall be done about the children, and a most difficult matter to get the parents, especially those who are poor and ignorant, to do what is necessary. The medical inspector's part will be to refer the children in the care of their teeth to the family, and through the family to the dentist, and then comes the part where we ask your help.

There are a great many of the school children whose parents cannot afford to have the proper work done at the proper time, and at the regular rates which you gentlemen should receive for this work. A great many men in the State, probably many of you gentlemen here, have already offered their services in the way of free dental clinics. That is a most laudable proposition, and if any of you can see your way clear to help the local school board, and the local medical inspectors by (at a certain time in the week or month) seeing children who would be referred to you for this purpose, it would help this work along very much. In some places that is impossible, and the work must be done in some other way, but I think a word from the State Board of Education concerning our difficulties, to you, will certainly be of aid, and what we say to you is this, "Will you be good enough, for your sake, and the sake of the community and the school children, to do all you can to help the medical inspector of the School Board of your district, in trying to get hold of the children, and make it possible for them to have a proper condition of their teeth and mouths?" (Loud applause.)

DR. STOCKTON

It naturally occurs to me somebody might be accused of "butting in," as they say. If I should offer myself, and say I would help your inspector, some other dentist might make that criticism.

DR. SCHAUFLER

If you "butt in" free, no one could say anything; if you make a charge, it might be different, but if any one dentist in a place offers to do the work at a reduced price, that is his business and he may do so, and it is something which any one who understands the matter will approve of immediately. I do not think there is any more reason why it should be called "butting in," on the part of the dentist, than it is "butting in" of any one else who offers to do anything for the community free of charge.

DR. HOLDEN

I would like to ask Dr. Schaufler whether he considers the medical inspection sufficient, and if he thinks that will be satisfactory. Will it be thorough enough so that you will be satisfied with the examination?

DR. SCHAUFLER

You mean the present examination by the medical inspectors?

DR. HOLDEN

Yes.

DR. SCHAUFLER

Not at all; but we have to be satisfied with it. There is a great deal of opposition even to this cursory inspection, but we find the only way to overcome that is to make it just as little as is necessary to find out where the trouble is, in the hope that as the work goes on we can get a great deal more. Asbury Park, Long Branch, Camden, Plainfield, and many other places in this State, have for many years had a compulsory medical inspection, and the subject has been worked out very satisfactorily here in New Jersey. In all places where it has been tried for a year or two the whole community is absolutely with the medical inspection, and in those places much more can be done. But in the small communities we have to overcome, first, the obstruction of the parents and, secondly, I am sorry to say, the enmity of a good many of the medical profession. We have to be satisfied with slow progress, and these rules show the minimum; that is, the State Board of Education has cut them down to the lowest possible necessity, in the hope that communities themselves will add to them.

(A member inquired if the work of the medical inspector was gratuitous, and if not what the compensation would be.)

DR. SCHAUFLER

The communities are compelled by law to pay for the inspection. Unfortunately that is where the great difficulty comes; most communities are unwilling to pay anywhere near the amount which the medical inspectors should receive. I think possibly the average in the smaller communities, outside of the rural districts, is from two hundred to two hundred and fifty dollars a year, for this work of medical inspection. In the lower part of the State, in Burlington and some other counties, they have been trying to get the work done at almost impossible prices; in some school districts they pay so much per child,

and in one place they have it down as low as twenty-seven cents per child per year, which is absolutely absurd. The trouble is that communities do not realize that by paying a little more to the inspectors they will save a great many school days for the children, and prevent epidemics and other evils; that the two hundred and fifty dollars which they pay a medical inspector may save them two or three thousand dollars, but the medical inspectors are all underpaid except, perhaps, in some of the larger cities. None of the medical inspection is done gratuitously; the law makes it obligatory upon the district to pay the physician. Of course if the medical inspector desires to turn over his pay for the purpose of employing a school nurse or something of that kind, he is free to do that.

DR. HAGUE

What has become of the dental inspectors already appointed by the Board of Education under salary; will they be eliminated?

DR. SCHAUFLER

The medical inspector has no right at all to treat the patient, as you will see by reading the little leaflet. The rule is laid down that the medical inspector may under no circumstances treat the patient for anything, unless he already happens to be the medical attendant of that household. Dental inspection is something entirely different, and communities so enlightened that they are to be most highly commended and should be encouraged to pay the dentists all they can.—Items of Interest.

SOCIETY AND OTHER NOTES

Officers of Societies are invited to make announcements here of meetings and other events of interest.

CALIFORNIA.

The Sacramento County Dental Society meets on the second Monday of each month.—W. H. Renwick, D.D.S., Secretary.

The Pasadena Branch of the Los Angeles County Dental Society holds its meetings on the third Friday evening of each month from October to April, inclusive.—Arthur B. Allen, D.D.S., Secretary.

COLORADO.

The Denver Dental Association holds its meetings on the second Thursday evening of each month from September to May.—Mallory Catlett, D.D.S., *President;* Ralph N. Pullen, D.D.S., *Secretary*.

ДАКОТА.

South Dakota State Board of Examiners holds its next meeting at Sioux Falls, S. D., January 10th, 11th and 12th, 1911, at 1:30 p. m.—Aris L. Revell, D.M.D., Lead, S. D., Secretary.

DISTRICT OF COLUMBIA.

The next regular meeting of the Board of Dental Examiners will be held in the Dental Department of the Georgetown University, January 9th, 10th and 11th, at 9 A. M.—Charles W. Cuthbertson, 309 Seventh Street N. W., Washington, Secretary.

GEORGIA.

The Atlanta Society of Dental Surgery meets the third Friday of each month at the Carnegie Library, at 8 p.m.—J. K. Barrett, Secretary.

ILLINOIS.

The Annual Clinic of the Alumni Association of the Chicago College of Dental Surgery will be held in the College Building on Wednesday, January 18, 1911.—H. C. Peisch, D.D.S., Chicago, Secretary.

The Knox County Dental Society meets February 15th and March 16th, 1911, at Galesburg.—J. D. Caheen, Secretary.

The Rock Island County Dental Society meetings are held the third Tuesdays in January, June and October at Rock Island, Moline and Geneseo.—J. H. Nichols, D.D.S., Rock Island, Secretary.

Iowa.

The forty-ninth annual meeting of the Iowa State Dental Society will be held at Des Moines, May 2, 3, 4, 1911.—W. G. Crandall, D.D.S., Spencer, Ia., Secretary.

KANSAS.

The Kansas City Dental Society meets the second Friday of each month.— M. Dewey, D.D.S., 1016 Armour Blvd., Secretary.

MASSACHUSETTS.

The Lowell Dental Society meetings are held on the first Tuesday evening in the months of February, April and October.—Edwin E. Kinney, D.D.S., Secretary.

MISSOURI.

The St. Louis Dental Society meets the first Tuesday of each month (unless otherwise announced) at 8 p.m., in the Auditorium of the St. Louis Medical Society.—G. B. Winter, D.D.S., Secretary.

NEBRASKA.

The Omaha Odontological Society meets every third Thursday in the month excepting June, July and August.—W. H. Sherradan, D.D.S., Secretary. The seventh semi-annual meeting of the Southwestern Nebraska Dental Society will be held at McCook, Neb., February 23d.—W. A. McHenry, D.D.S., Secretary.

Оню.

The Columbus Dental Society meets the last Tuesday evening in each month except in July and August, at the Carnegie Library Bldg.—Charles Swope, D.D.S., Secretary.

TEXAS.

The Dallas Dental Society meets the second Saturday in each month at the office of the Essayist for that particular meeting.—Allen N. Nearby, D.D.S., Secretary.

WASHINGTON.

The King County Dental Society meetings take place the first Tuesday in the month at 1032 Henry Bldg.—A. D. Remington, D.D.S., Secretary.

The Spokane County Dental Society meetings are held the first Thursday after the second Tuesday. No meetings in July or August.—Robert Carratte, Secretary.

WISCONSIN.

The semi-annual meeting of the Wisconsin State Board of Dental Examiners will be held at the Wisconsin College of Physicians and Surgeons, beginning January 15th, 1911, at 9 A.M.—G. C. Marlow, D.D.S., Lancaster, Wisconsin, Secretary.

THE G. V. BLACK DENTAL CLUB

The G. V. Black Dental Club of St. Paul, Minn., will hold a midwinter clinic in St. Paul, on Feb. 16-17, 1911.

A very interesting program is being arranged. Operations will be made and papers read by prominent members of the profession. Full program will be published later. The profession generally is invited to attend this meeting.

Members of the profession having anything new to offer for our consideration are most cordially invited to be present and show same. Drs. G. V. Black and C. N. Johnson of Chicago will be in attendance and take part in this meeting.

For further information address R. B. Wilson, D.D.S., Sec'y., Am. Nat. Bank Bldg., St. Paul, Minn.

PATENTS

- 961854. Ingot mould, Emil Gathmann, New York, N. Y.
- 963418. Dentist's flask, James B. Buchanan, Chicago, Ill.
- 963541. Artificial teeth, Robert Galloway, West Philadelphia, Pa.
- 963595. Seat attachment for barbers' chairs, Angelo R. Lerro, Philadelphia, Pa.
- 963172. Dental plate, Jacob Petry, Pittsburg, Pa.
- 963648. Artificial tooth and crown, Charles W. Plumley, Parkersburg, W. Va.
- 963794. Dental waste-receiver, John J. Moffitt, Harrisburg, Pa.

Copies of above patents may be obtained for fifteen cents each, by addressing John A. Saul, Solicitor of Patents, Fendall Building, Washington, D. C.

WARNING!

Reports have reached us that an agent for "Marjorie" is going over the country claiming to represent us as general agents for that preparation, endeavoring to induce dentists and dealers to purchase on the strength of our alleged warranty, instructing them to try the material and return to us if not satisfactory. Notice is hereby given that we are not agents for "Marjorie;" have no connection whatever with its manufacture and sale, and are not responsible for any representation claimed to have been made as stated above.

Should any of the preparation be returned to us it will not be accepted, nor do we warrant it in any manner or degree, Very truly,

Toledo, Ohio, May 28, 1910,

THE RANSOM & RANDOLPH CO.

Cleveland Toledo Gr. Rapids.